Computing Glossary

algorithm – an unambiguous procedure or precise step-by-step guide to solve a problem or achieve a particular objective.

computer networks – the computers and the connecting hardware (wifi access points, cables, fibres, switches and routers) that make it possible to transfer data using an agreed method ('protocol').

control – using computers to move or otherwise change 'physical' systems. The computer can be hidden inside the system or connected to it.

data – a structured set of numbers, representing digitised text, images, sound or video, which can be processed or transmitted by a computer.

debug – to detect and correct the errors in a computer program.

digital content – any media created, edited or viewed on a computer, such as text (including the hypertext of a web page), images, sound, video (including animation), or virtual environments, and combinations of these (i.e. multimedia).

information – the meaning or interpretation given to a set of data by its users, or which results from data being processed.

input – data provided to a computer system, such as via a keyboard, mouse, microphone, camera or physical sensors.

internet – the global collection of computer networks and their connections, all using shared protocols (TCP/IP) to communicate.

logical reasoning – a systematic approach to solving problems or deducing information using a set of universally applicable and totally reliable rules.

output – the information produced by a computer system for its user, typically on a screen, through speakers or on a printer, but possibly though the control of motors in physical systems.

program – a stored set of instructions encoded in a language understood by the computer that does some form of computation, processing input and/or stored data to generate output.

repetition – a programming construct in which one or more instructions are repeated, perhaps a certain number of times, until a condition is satisfied or until the program is stopped.

search – to identify data that satisfies one or more conditions, such as web pages containing supplied keywords, or files on a computer with certain properties.

selection – a programming construct in which the instructions that are executed are
determined by whether a particular condition is met.

sequence – to place programming instructions in order, with each executed one after the other.

services – programs running on computers, typically those connected to the internet, which provide functionality in response to requests; for example, to transmit a web page, deliver an email or allow a text, voice or video conversation.

simulation – using a computer to model the state and behaviour of real-world (or imaginary) systems, including physical and social systems; an integral part of most computer games.

software – computer programs, including both application software (such as office programs, web browsers, media editors and games) and the computer operating system. The term also applies to 'apps' running on mobile devices and to web-based services.

variables – a way in which computer programs can store, retrieve or change simple data, such as a score, the time left, or the user's name.

World Wide Web – a service provided by computers connected to the internet (web servers), in which pages of hypertext (web pages) are transmitted to users; the pages typically include links to other web pages and may be generated by programs automatically.